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Invited Commentary

Commentary on 'A Scoring System (DISTAL) for Predicting Failure of Snuffbox Arteriovenous Fistulas'

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Snuffbox fistulas are uncommonly performed by most access surgeons. There are only 8 reports in the literature, by search of HUBNET, over the last 30 years referencing this access, despite relatively good results reported in all series. The fistula first initiative and updated 2006 K-DOQI guidelines¹ do not even mention snuffbox fistulas as an alternative access site. The UK Renal Association guidelines² strongly recommend the use of arteriovenous fistula over graft, however, do not discuss any specific access sites. Dr Twine and colleagues suggest that approximately 50% of their patients would be potentially suitable for snuffbox fistulas, and undertook such a fistula in about 25% of their patients. They present a scoring system to assess failure of snuffbox fistulas.

The authors created the mnemonic DISTAL to indicate the risk factors associated with failure. These factors included commonly identified issues for access complications, including: diabetes, ischemic heart disease, stroke, multiple previous access-2 snuffbox procedures, age over 70, and vein diameter less than 2 mm. Using a DISTAL score of <3 to determine who would receive the snuffbox fistula, would have still permitted creation of this access in 88% of the patients who actually underwent the procedure, with an excellent 1 year primary patency rate of 71%. By using these criteria, the authors find that they would have decreased early failure by 23%, thereby improving primary patency rates. They also suggest that if patients have scores greater than 3, this might prompt the surgeon to follow the access more closely for early signs of failure which might need intervention. In this series, however, the DISTAL

score did not correlate with need for later intervention in patent access. This was felt to be secondary to intrinsic or iatrogenically caused injuries to the vein in the forearm, with development of later vein stenoses.

Clearly in this day and age of fistula first initiatives, while it is laudable to attempt the most distal fistula first, it is equally important to choose the best fistula, avoiding the need for multiple interventions to mature the fistula, with the associated cost, as well as the risk of prolonging catheter time for patients in need of urgent hemodialysis, or currently on hemodialysis.

Dr Twine and associates are to be congratulated for their excellent results, and for providing us with a method of assessing these very distal access sites, which might increase creation of distal access while potentially decreasing primary failure rates. Clearly this scoring system does need to be validated by other centers, before concluding that indeed, the DISTAL scoring will predict successful snuffbox fistula creation.

References

- 1 NKF-DOQI. *Clinical Practice guidelines for vascular access*. National Kidney Foundation. Available from: URL: http://www.kidney.org/professionals/KDOQI/guideline_upHD_PD_VA/index.htm; 2006.
- 2 Fluck R, Kumwenda M. *Clinical practice guidelines: vascular access for haemodialysis*. The UK Renal Association. Available from: URL: http://www.renal.org/Libraries/Guidelines/Vascular_Access_for_Haemodialysis_-_FINAL_VERSION_-_05_January_2011.sflb.ashx; 2011.

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